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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
09/851,072	05/08/2001	Jingen Zhang	393042	2831
27128	7590 07/02/2004		EXAMINER	
BLACKWEI	L SANDERS PEPER	HAMLIN, DERRICK G		
720 OLIVE S' SUITE 2400	TREET		ARTUNIT	PAPER NUMBER
ST. LOUIS, N	MO 63101		1751	

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		09/851,072	ZHANG ET AL.				
		Examiner	Art Unit				
		Derrick G. Hamlin	1751				
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address				
THE - Exte after - If the - If NO - Failt Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION.  Insions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication.  It is period for reply specified above is less than thirty (30) days, a reply of period for reply is specified above, the maximum statutory period ware to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely, the mailing date of this communication. D (35 U.S.C. § 133).				
Status							
1)⊠ 2a) <u></u> 3) <u></u>							
Disposit	ion of Claims						
5)□ 6)⊠ 7)⊠	<ul> <li>4)  Claim(s) 1-30 is/are pending in the application.</li> <li>4a) Of the above claim(s) 31-62 is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-18,20-23 and 25-30 is/are rejected.</li> <li>7)  Claim(s) 19 and 24 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Applicati	ion Papers						
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority ι	ınder 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
2) 🔲 Notic 3) 🔯 Inforr	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date 9/01,4/02.	4) Interview Summary ( Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:					

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

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#### **DETAILED ACTION**

### Election/Restrictions

Applicant's election with traverse of claims 1-30 in Paper No. 4/8/2004 is acknowledged. The traversal is on the ground(s) that it wouldn't burden the examiner. This is not found persuasive because the applicant is wrong and it would burden the examiner.

The requirement is still deemed proper and is therefore made FINAL.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(9) as being anticipated by Herber et al., (US 3,976,585).

Herber discloses functional fluid compositions comprising a major amount of a base stock material which may be an ester of phosphorus and an additive amount of an acid scavenger and corrosion inhibitor which is a monoepoxy substituted cyclohexane such as C1-4 alkyl-3,4-epoxycyclohexane, particularly useful as aircraft hydraulic fluid.

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(abstract) The reference further teaches the epoxide disclosed as Formula I. (col. 2, lines 40-50).

The reference is anticipatory.

Claims 1, 16 and 17 are rejected under 35 U.S.C. 102(9) as being anticipated by Herber et al., (US 3,941,709).

Herber discloses functional fluid compositions comprising a major amount of a base stock material which may be an ester of phosphorus and an additive amount of an acid scavenger and corrosion inhibitor which is a monoepoxy norbornyl carboxylate such as C1-4 alkyl-5,6-epoxynorbornane carboxylate, particularly useful as aircraft hydraulic fluid. (abstract) The reference further teaches the epoxide disclosed as Formula II. (col. 2, lines 40-50).

The reference is anticipatory.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-15, 22, 23, and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herber et al., (US 3,976,585).

Herber is relied upon for the disclosure cited above.

The reference fails to teach all of the instant examples of Formula I.

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Although the reference fails to teach all of the disclosed each example of Formula I, all of the disclosed structures are encompassed by Formula I.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to create the instant functional fluid as Herber discloses functional fluid compositions comprising a phosphorus ester base stock material and an epoxide of Formula I.

Claims 18, 20 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herber et al., (US 3,941,709).

Herber is relied upon for the disclosure cited above.

The reference fails to teach all of the instant examples of Formula II.

Although the reference fails to teach all of the disclosed each example of Formula II, all of the disclosed structures would be encompassed by Formula II.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to create the instant functional fluid as Herber discloses functional fluid compositions comprising a phosphorus ester base stock material and an epoxide of Formula II.

In view of the forgoing, the above claims have failed to be patently distinguishable over prior art.

The remaining references listed on form(s) 892 and/or 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

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## Allowable Subject Matter

Claims 19 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The reference fails to disclose the specific epoxide acid scavengers and neither reference teaches the phosphorus or silicone containing structures.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick G. Hamlin whose telephone number is (571) 272-1317. The examiner can normally be reached on Monday-Fridays from ~8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta, can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Derrick G. Hamlin

6/21/04

Del

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700